ROBERT H. PETERSON CO.

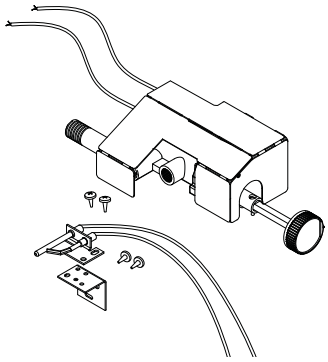
realfyre
PREMIUM GAS LOGS

Owner's Manual

AUTOMATIC REMOTE LIGHTING SAFETY PILOT SYSTEM
WITH VARIABLE FLAME-HEIGHT REMOTE
FOR NATURAL OR PROPANE GAS

FEATURES:
• CONTROL OPERATED ON/OFF •
• VARIABLE FLAME-HEIGHT REMOTE •
• VARIABLE FLAME HEIGHT CONTROL •

SUITABLE FOR THE FOLLOWING BURNERS:
• PAN BURNERS (P-SERIES) •
• G4 SERIES BURNERS •
• G45 SERIES BURNERS •



Installer: Leave this manual with the consumer.

Consumer: Retain this manual for future reference.

Model APK-17(M)(P)

FOR USE WITH PETERSON GAS LOG SETS ONLY

WARNING

If the information in this manual is not followed exactly, a fire or explosion may result, causing property damage, personal injury, or loss of life.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

WHAT TO DO IF YOU SMELL GAS:

- Open a window.
- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in the building.
- Immediately call the gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach the gas supplier, call the fire department.

- **Installation and service must be performed by a qualified installer, service agency, or the gas supplier.**

INSTALLER & CONSUMER
These instructions **MUST** be retained with this appliance

Important: Read these instructions carefully before starting installation.

BE SURE DAMPER IS FULLY OPEN WHEN OPERATING THE LOG SET

PETERSON VENTED GAS LOG SETS ARE TO BE OPERATED ONLY IN A FULLY VENTED, NONCOMBUSTIBLE FIREPLACE WITH DAMPER AND CHIMNEY FREE OF ANY OBSTRUCTIONS. THE FIREPLACE MUST BE DESIGNED AND APPROVED TO BURN WOOD. Like burning natural firewood, the Peterson log set is designed to burn with a yellow, smoky flame. For this reason, it must be adequately vented. Be sure the fireplace damper is fully open when you burn the gas log set. The smallest dimension of the chimney flue must be at least 8". If it is smaller, DO NOT USE A PETERSON LOG SET. If fumes from the burner emerge into the room when the damper is fully open, creating a smell like a smoldering oil lamp, it indicates that the fireplace draft is defective. Check chimney flue for obstructions. DO NOT OPERATE LOGS UNTIL THE FIREPLACE DRAFT IS CORRECTED. Check with your dealer or installer. Do not use firewood with this unit.

This safety pilot system contains a control certified by C.S.A.

IMPORTANT INFORMATION

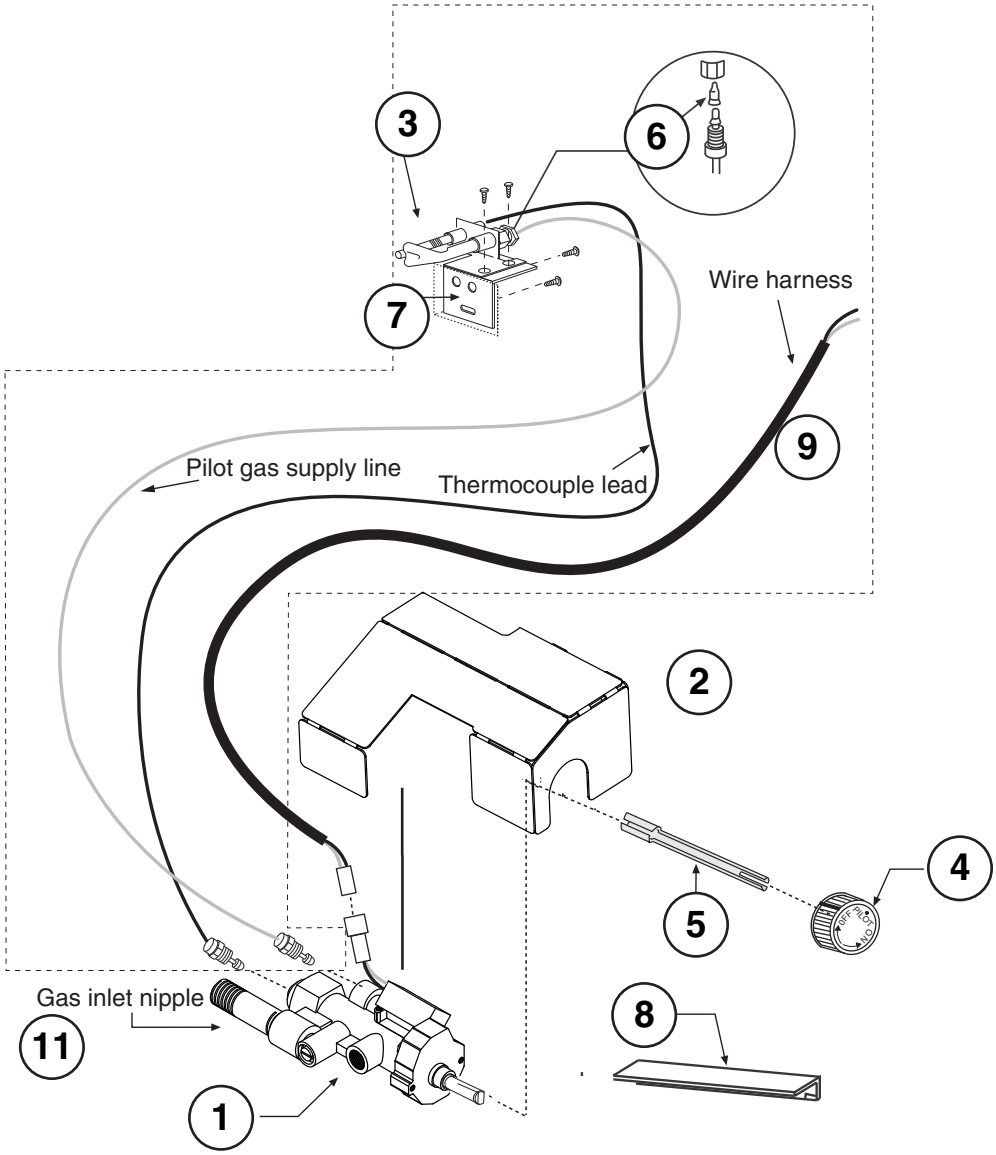
The installation, including provisions for combustion and ventilation air, must conform with local codes or, in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1 (latest edition).

This appliance and its individual shutoff valve must be disconnected from the gas supply piping system when testing at pressures exceeding $^1/_2$ psig. Do this by closing the gas supply valve.

This appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any testing of the gas supply system at test pressures up to and including $^1/_2$ psig.

WHEN GLASS FIREPLACE ENCLOSURES (DOORS) ARE USED, OPERATE THE GAS LOG SET WITH THE GLASS DOORS FULLY OPEN; BOTH SIDES IF FIREPLACE IS SEE-THRU TYPE.

PARTS LIST



Item No.	Description	Item No.	Description
1	Safety pilot valve (natural gas)	6	Pilot orifice (natural gas)
or	Safety pilot valve (propane gas)	or	Pilot orifice (propane gas)
2	Heat shield (fits over valve)	7	Mounting bracket, pilot assembly
3	Pilot assembly (natural gas)	8	Flame diverter
or	Pilot assembly (propane)	9	Wire harness for remote receiver (if equipped)
4	Knob	10	VR-1A remote kit (if equipped)
5	Knob extension	11	3/8" x 2" nipple

HOW TO ASSEMBLE YOUR APK-17 SAFETY PILOT SYSTEM

This safety pilot kit must be installed by a qualified professional installer. Instructions must be followed carefully during installation to ensure proper performance and achieve full benefit from your gas log set and safety pilot kit.

GENERAL - These instructions must be used as a supplement to the instructions supplied with your Peterson gas log set. Follow the gas log set instructions and make adjustments as appropriate for the addition of a safety pilot kit. Use gas pipe sealing compound which is resistant to all gasses or Teflon tape and apply to all male pipe connections. Make sure that all connections are tight. Caution: Do not cover the safety pilot valve with sand or lava granules, it may cause overheating.

FOR L.P. (PROPANE) GAS - The safety pilot kit may require a pilot conversion unless it is a propane model. Replace the natural gas orifice with the L.P. gas orifice (Item No. 6, PARTS LIST) contained in the envelope marked "L.P.-GAS". Reattach the pilot gas supply line to the pilot.

STEP 1 - CONNECTING THE SAFETY VALVE TO THE BURNER

A. Remove the heat shield, knob and handle extension.

B. Apply gas pipe compound or Teflon tape to the fuel injector/air mixer pipe threads. Be careful not to block the opening of the fuel injector/air mixer.

C. Screw the safety valve (Item No. 1) to the fuel injector or air mixer on the burner (Fig. 3-1). Be sure that the valve is positioned parallel with the fireplace floor.

Note: Heat shield is not shown but must be in place when operating your log set.

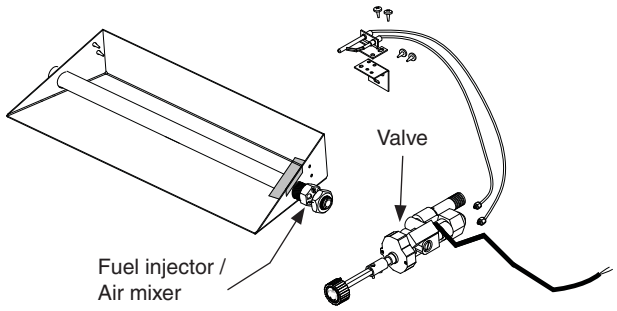


Fig. 3-1

STEP 2 - INSTALLING THE FLAME DIVERTER BRACKET

Purpose:

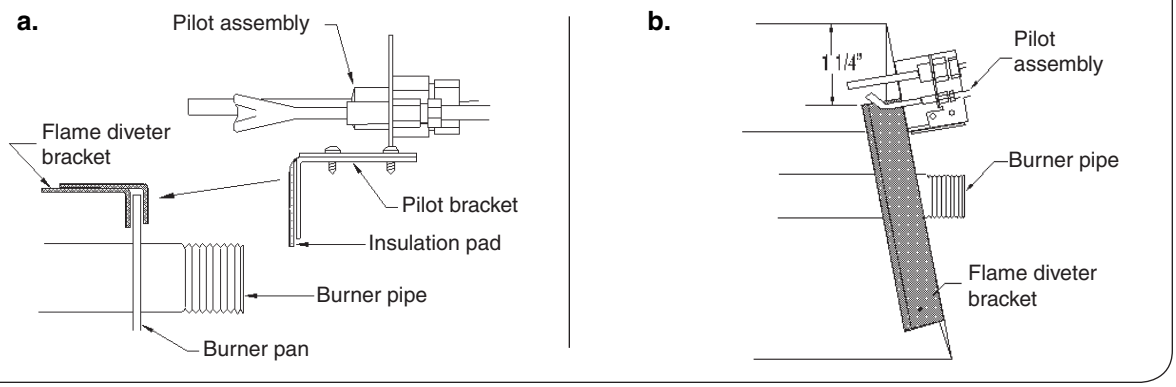
The flame diverter bracket, when properly installed onto Peterson "G4", "GX4", "VG4" and "P" series burner pans equipped with a safety control system, will promote quicker ignition of your Peterson gas log set and increase safety.

A. Install the flame diverter bracket before installing the pilot assembly.

B. Place the flame diverter bracket (Item 8) over the side edge of the burner pan where the Peterson safety control system pilot bracket (Item 7) will be attached. The bracket should be placed approximately 1 $^{1}/_{4}$" from the back of the burner pan (see Fig. 3-2).

C. Tap the bracket lightly with a hammer to secure it in place.

Fig. 3-2



HOW TO INSTALL THE APK-17 SAFETY PILOT SYSTEM (Cont.)

CAUTION: Keep granules and all foreign objects away from pilot burner assembly and valve assembly.

CAUTION: Route the pilot supply tube and thermocouple lead as required so that they curve gradually. DO NOT KINK. (Reference Fig. 3-1.)

STEP 3: INSTALL THE PILOT ASSEMBLY TO THE BURNER

Refer to the PARTS LIST when following these instructions.

GLOWING EMBER - G4, GX4, and G45 SERIES

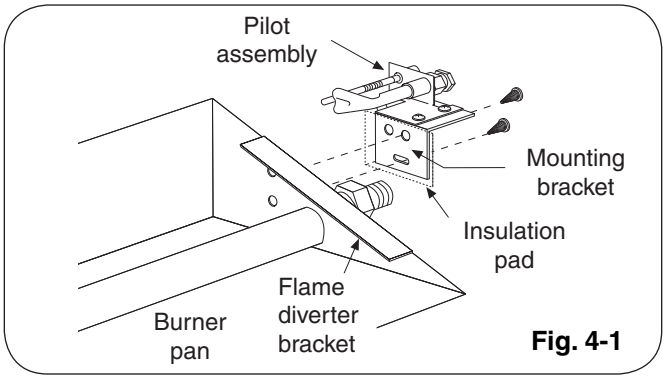


Fig. 4-1

A. Carefully bend the thermocouple lead and the pilot gas supply line so the pilot assembly is positioned as illustrated above.

B. **Place the insulating pad** between the bracket and the pan. Insert the screws through the pilot bracket and the holes in the end of the pan.

FLAME PAN - P SERIES

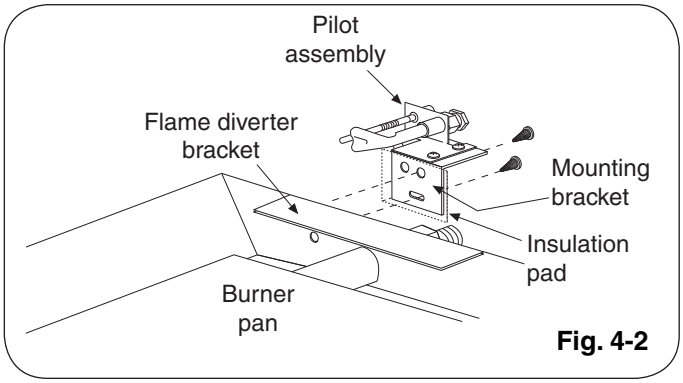


Fig. 4-2

A. Carefully bend the thermocouple lead and the pilot gas supply line so the pilot assembly is positioned at end of the pan as illustrated.

B. **Place the insulating pad** between the bracket and the pan. Insert the screws through the pilot bracket and the holes in the end of pan.

STEP 4: HEAT SHIELD PLACEMENT

Cover the APK-17 safety valve with the heat shield (PARTS LIST item 2) as shown in Fig. 4-3.

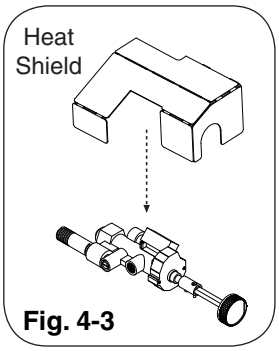


Fig. 4-3

Do not cover the valve with sand or granules.

Note: Place the plastic heat shield over the remote receiver (if equipped) with the open side facing front to allow access to the receiver controls.

CONNECT THE REMOTE RECEIVER TO THE APK-17 VALVE (WHEN EQUIPPED)

A. Discard the black wires that come with the remote receiver (see PARTS LIST). Connect the valve wire harness to the remote receiver as shown in Fig. 4-4. It is recommended to place the receiver as far from the gas log set as possible.

Note: When upgrading your APK-17M with a remote receiver, follow step A above. Then connect the wire harness to the valve as shown in Fig. 4-5.

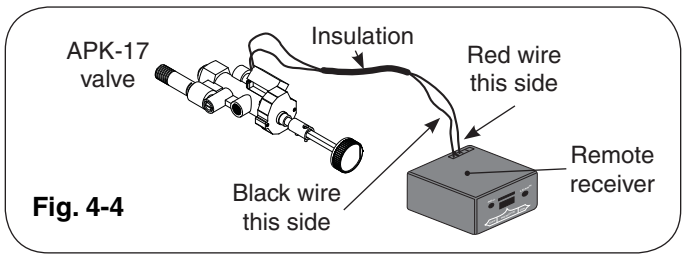


Fig. 4-4

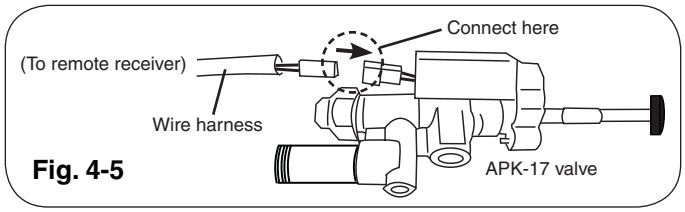


Fig. 4-5

HOW TO LIGHT THE PILOT

Push in slightly on the control knob and turn to the 'OFF' position (Fig. 5-1). Then turn the knob to the 'PILOT' position (Fig. 5-2). Push the knob **firmly and fully** in and at the same time place a long lighted match or long necked lighter at the pilot burner. The pilot should light. Hold the knob in approximately 60 seconds. The pilot should stay lit. If the pilot does not stay lit, turn to the full 'OFF' position (Fig. 5-1). Wait five minutes and repeat the lighting instructions.

HOW TO TURN YOUR GAS LOG SET ON AND OFF USING YOUR SAFETY PILOT KIT

BE SURE THE DAMPER IS FULLY OPEN WHEN OPERATING YOUR GAS LOG SET. TO TURN ON THE GAS LOG SET FROM THE PILOT POSITION when pilot is lit (Fig. 5-2), turn the knob 90° counter clockwise to the 'ON' position (Fig. 5-3).

TO TURN OFF THE GAS LOG SET FROM THE ON POSITION (Fig. 5-3), turn the knob 90° clockwise to the 'PILOT' position (Fig. 5-2).

TO TURN OFF THE GAS LOG SET AND THE PILOT FROM THE PILOT POSITION (Fig. 5-2), push in slightly on the knob and turn 90° clockwise to the 'OFF' position (Fig. 5-1).

For remote lighting; follow the instructions for lighting the pilot above and then follow the instructions that came with your remote.

FOR IMPROVED PILOT OPERATION

PILOT ADJUSTMENT - Should the pilot require adjustment, the following steps should be taken: With the pilot lit and the control knob in the pilot position, use a long narrow screw driver and turn the pilot adjustment screw slowly clockwise to reduce the pilot flame or counter clockwise to increase the flame (Fig. 5-4). The adjustment screw can be turned so that the pilot flame is completely extinguished. Some tightening of the screw may occur during adjustment; this is normal. The pilot flame should be a soft blue color with slightly yellow tipping which encircles the thermocouple tip.

After adjustment turn the control knob to the 'ON' position to assure proper ignition of the log burner.

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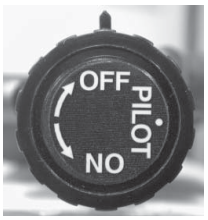


1. Use "OFF" only when complete shutdown is necessary.

Fig. 5-1
OFF POSITION
BURNER OFF - PILOT OFF

READ HERE

2. Turn Dial to "PILOT" position. With match ready press knob firmly and fully in and hold for 60 seconds while lighting pilot.

Fig. 5-2
PILOT POSITION
BURNER OFF - PILOT ON

READ HERE

3. Turn knob to "ON" to light burner.

Fig. 5-3
ON POSITION
BURNER ON - PILOT ON

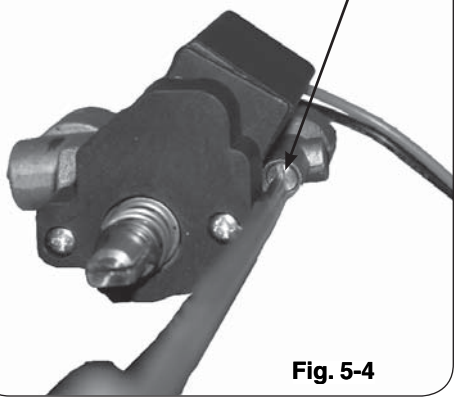
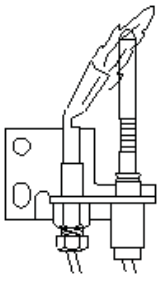


Fig. 5-4



Example of burner pilot flame

Fig. 5-5

NOTES PAGE

Please use this page to record any information that you may want to have at hand.

TROUBLESHOOTING THE APK-17 SAFETY PILOT KIT

PROBLEM	CAUSE	SOLUTION
1. Pilot will not light.	**a.** Obstruction in pilot gas supply/ pilot gas supply line is kinked. **b.** Inadequate gas supply. **c.** Air in line.	**a.** Clear out obstruction. Replace pilot gas supply line if kinked. **b.** Have gas pressure checked by installer or gas supplier. **c.** Air should clear, attempt to relight.
2. Pilot will not stay lit after releasing knob.	**a.** Thermocouple connection to valve either too tight or too loose. **b.** Bad thermocouple.	**a.** Thermocouple should be finger tight and then $^1/_8$" turn with a wrench. **b.** Replace thermocouple.
3. Log set extinguishes a few minutes after lighting.	**a.** Inadequate gas supply causes pilot flame to reduce after burner lights.	**a.** Using pilot adjustment, increase gas to pilot. Pilot flame must be in contact with the thermocouple tip.
4. Log set extinguishes after burning for some time (approximately 10 minutes to 1 hour).	**a.** Thermocouple has overheated; glass doors are closed. **b.** Thermocouple has overheated; insulation pad is not in place. **c.** Thermocouple has overheated; burner flames are heating the thermocouple cold junction.	**a.** Be sure glass doors are open during operation. **b.** Be sure that the insulation pad is in place between the burner pan and the pilot bracket. **c.** Be sure the pilot assembly and the flame diverter are in their proper position. Rearrange logs so that flame is not deflected to the thermocouple.

WARRANTY

PETERSON VENTED GAS LOG SETS
LIMITED WARRANTY

All Peterson gas logs are **WARRANTED for as long as you own them (lifetime).**

All Peterson burner assemblies are **WARRANTED for TEN (10) YEARS.**

SPK-26 controls are covered by a **THREE (3) YEAR "All Parts" Warranty.**

All other Peterson valves, pilots, and controls are covered by a **ONE (1) YEAR Limited Warranty (excluding batteries).**

PLEASE KEEP A COPY OF YOUR SALES SLIP FOR PROOF OF PURCHASE

This warranty applies to the original purchaser and to single family residential use only. It commences from date of purchase, and is valid only with proof of purchase.

This warranty does not cover parts becoming defective through misuse, accidental damage, electrical damage, improper handling, storage, and/or installation. Product must be installed (and gas must be connected) as specified in the instructions or operator's manual, by a **qualified professional installer.** Accessories, parts, valves, remotes, etc., when used must be Peterson Co. product.

This warranty **does not** apply to rust, corrosion, oxidation, or discoloration, unless the affected component becomes inoperable. It **does not** cover labor or labor-related charges.

This warranty specifically excludes liability for **indirect, incidental,** or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion may not apply to you. This warranty gives you specified legal rights, and you may have other rights that may vary from state to state.

For additional information regarding this warranty, or to place a warranty claim, contact the R.H. Peterson dealer where the product was purchased.

ROBERT H. PETERSON CO.

Quality Check **Date:**_____

Orifice # (Main):_____
Orifice # (Other):_____ **Model #:** _____
Leak Test: _____ **Serial #:** _____
Burn Test: _____ **Air Shutter:** _____
Gas Type: **NAT. / PROPANE** **Inspector:** _____